SUSTAINABLE

systems

MAPEI®

SUSTAINABILITY
Mapei approach

Mapei has an eye on the future when creating products and offers innovative solutions for designing and constructing in an eco-sustainable way. This is a commitment that requires a sense of responsibility and the ability to make concrete choices in order to supply designers, contractors, workers and clients with solutions that are safe, reliable and long-lasting and that have the lowest impact possible on the environment.

Founded more than eighty years ago in Milan, Italy, Mapei has since been proposing solutions of excellence for chemical products for the building sector all around the world. Its products are used in both the construction of large-scale infrastructures and iconic works of architecture, as well as in the residential sector. A target achieved without ever forgetting that it is only a constant, open and transparent dialogue with our contacts and clients that enables us to truly understand the real needs of the market and to provide innovative and sustainable responses.

Mapei pursues a concept of sustainability that encompasses a host of aspects in terms of living comfort and wellbeing. It firmly believes that the profits of a company should go hand in hand with ethics, respect for people and the creation of value for the territory.

It has always applied these principles to its strategy. And with this document, once again, the company wishes to underline this approach because, at times, simply doing something is not enough; you also need to share values and expectations. There are three cornerstones to sustainability according to Mapei: the planet, projects and people.

sustainable SOLUTIONS

The Mapei Sustainable Systems are made with the most durable products that have VOC content and VOC emissions certification, EPDs as well other Mapei sustainable technologies. These initiatives can contribute to sustainable project certification such as Green Star by GBCA, Living Building Challenge (LBC), LEED by USGBC and BREEAM.

SYSTEM FOR THE **INSTALLATION OF TILES OVER CONCRETE**

concrete substrate

1

adhesive
Keraquick Maxi S1, Keraflex Maxi S1 Zero, *or* **Ultralite S1 Flex Zero**

2

grout
Ultracolor Plus

3

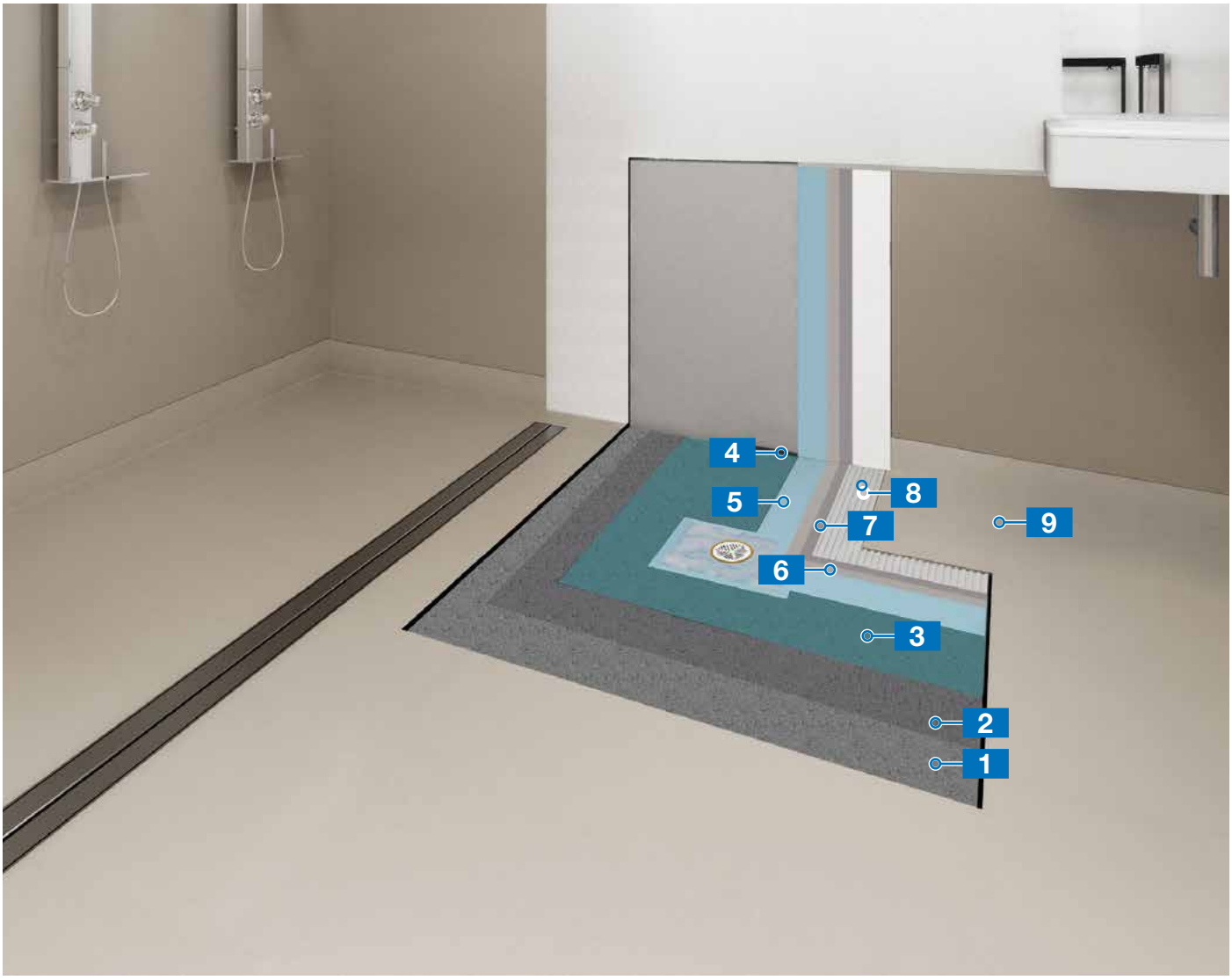
sealant
Mapesil AC *or* **Mapesil LM**

4

SYSTEM FOR THE **INSTALLATION OF TILES IN WET AREAS**

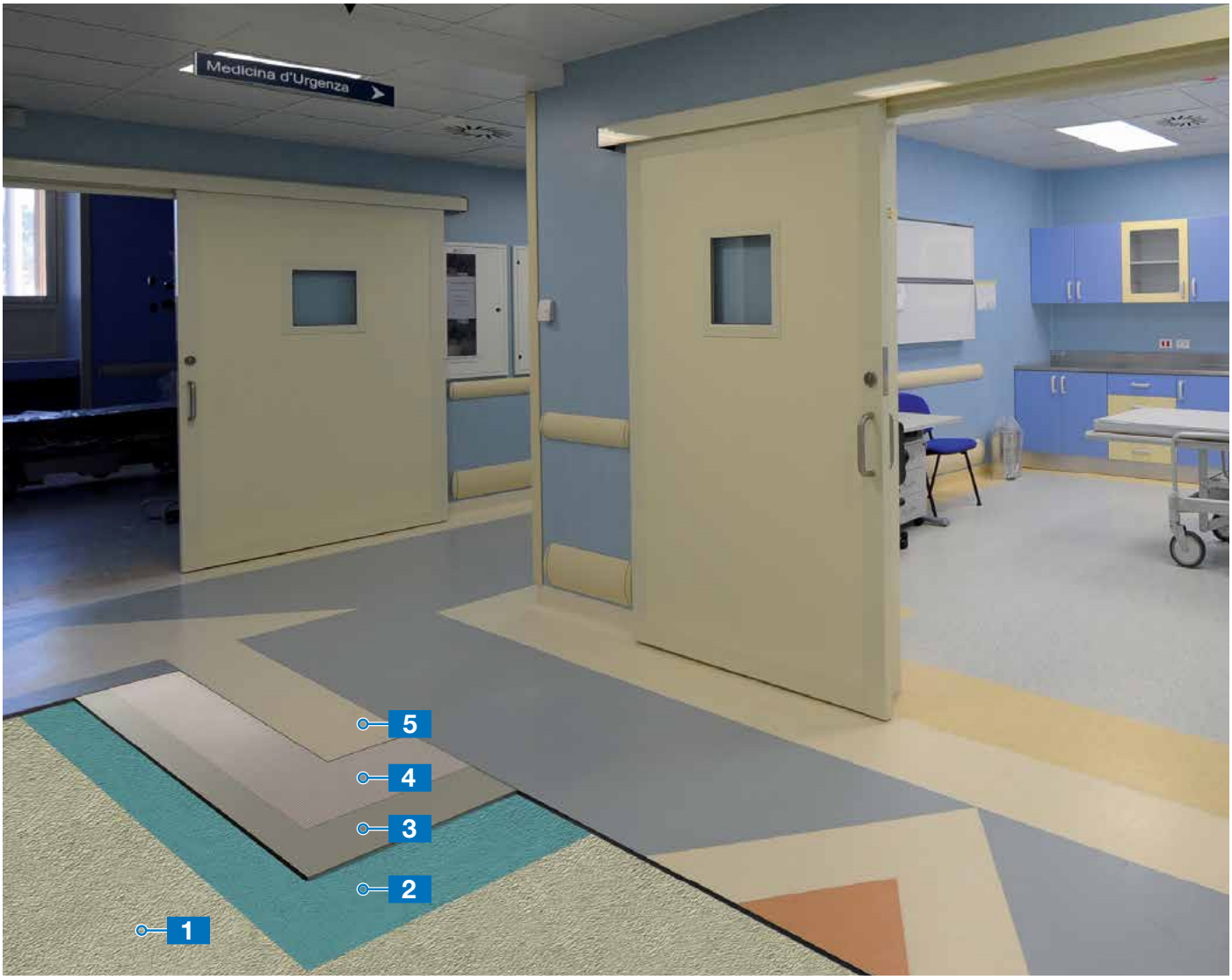
concrete substrate	*screed* **Topcem Pronto**	*adhesive sealant* **Mapeflex PU 45 FT**	*waterproofing membrane* **Mapelastic AquaDefense**	*adhesive* **Keraquick Maxi S1, Keraflex Maxi S1 Zero,** *or* **Ultralite S1 Flex Zero**	*grout* **Ultracolor Plus**	*sealant* **Mapesil AC** *or* **Mapesil LM**
1	**2**	**3**	**4**	**5**	**6**	**7**

SYSTEM FOR THE **INSTALLATION OF VINYL SHEET IN INTERNAL WET AREAS**



1	2	3	4	5	6	7	8	9
concrete substrate	*bonded screed* **Topcem Pronto**	*moisture vapour barrier* **Mapeproof Primer**	*joint sealant* **Mapeflex PU 45 FT**	*waterproofing membrane* **Mapegum WPS** *or* **Mapelastic AquaDefense**	*primer* **Eco Prim T Plus**	*skim coating compound* **Planiprep SC**	*adhesive* **Adesilex G19** *for floors* **Ultrabond Eco V4 Evolution** *for walls*	*vinyl sheet*

SYSTEM FOR THE **INSTALLATION OF VINYL FLOOR COVERINGS OVER CONCRETE**



properly prepared concrete substrate

1

moisture vapour barrier
Mapeproof Primer

2

levelling compound
Ultraplan, Ultraplan Eco *or*
Ultraplan Maxi

3

adhesive
Ultrabond Eco 380,
Ultrabond Eco V4 Evolution *or*
Utrabond Eco VS90 Plus

4

vinyl floorcovering

5

Volatile Organic Compound (VOC) Testing

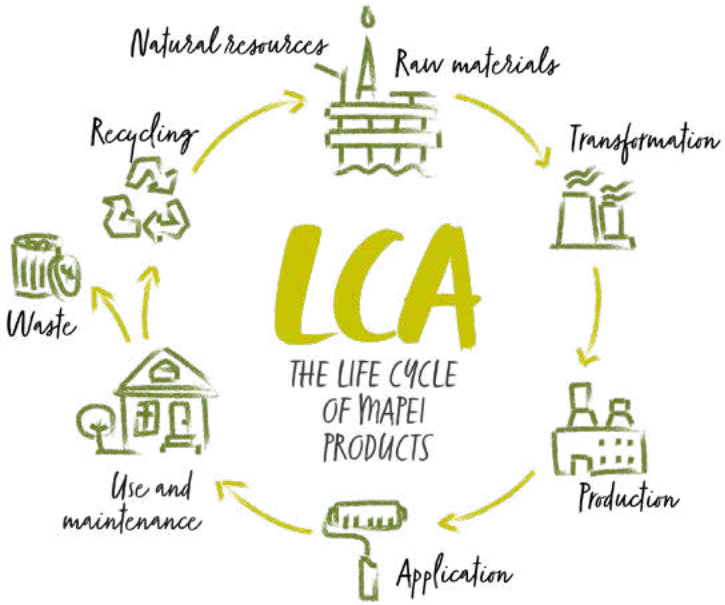
VOCs are chemicals that are emitted as gases from products such as adhesives, sealants and other chemical products for buildings. Mapei has developed solvent-free products with low content and emission of VOCs with the ability to guarantee good air quality inside the buildings where they are used, for the well-being of both those who use and apply the products and those who use the buildings.

The products used in **Mapei's Sustainable Solutions** contribute towards several credits in a number of Green Star rating tools, thanks to their very low content and emission of VOC. The VOC content of the Mapei products can be found in their **Safety Data Sheet (SDS)**. Mapei products can be tested under different VOC emission test protocols and may have one or more VOC emission test certificates.

Environmental Product Declaration (EPD)

Mapei calculates the impacts its products have on the environment using the standardised **LCA (Life Cycle Assessment)** method, resulting in the issuing of an **Environmental Product Declaration (EPD)**.

The analysis of a product's life cycle, therefore, is an evaluation of its impact on the environment during each and every stage of its life



EPDs are used to document the **effects a product has on the environment** throughout its entire life cycle and **Mapei** is in possession of this type of certification for many of its solutions. The impacts on the environment taken into consideration are numerous: from global warming to the depletion of our planet's natural resources to the influence they have on the ecosystem. For **Mapei** it is important to minimise any negative effects its products have on the environment in order to make them more and more sustainable: and to achieve this scientifically it always measures their impact according to international standards. In the construction sector, EPDs are a fundamental element and help clients choose products with a low impact on the environment in order to meet the requirements of organisations and certification protocols for sustainable building.

EPD®
THE INTERNATIONAL EPD® SYSTEM

Products with CO_2 emissions fully offset

The Mapei Group's commitment to combating climate change has led the company to seek solutions with the lowest greenhouse gas emissions. This effort is demonstrated by the R&D and Operations departments who are constantly refining product formulas and optimising production processes.

Understanding that the journey to a sustainable future does not end here, Mapei has taken the steps to promote the total offsetting of residual CO_2 emissions during the life cycle of products by acquiring certified carbon credits to support forestry protection and renewable energy projects.

Mapei Australia's key selling Ceramic products, Ultracolor Plus, Keraflex Maxi S1 Zero and Ultralite S1 Flex Zero are now offered with fully offset CO_2 emissions. This initiative underscores Mapei's commitment to producing products with the lowest environmental impact and the group's contribution to the UN Sustainable Development Goals (SDG).

For more details on how emissions are calculated and how climate mitigation projects are financed through certified carbon credits, click here or scan the QR code below.

Other Mapei Sustainable Solutions

Ultralite Technology

To meet the new needs of the ceramic sector, Mapei has studied the **Ultralite range, deformable** adhesives, characteristics that make them the ideal choice for laying large format tiles. The special formulation created by the Mapei Research and Development Laboratories, with the addition of **glass microspheres** or **inert materials** of natural origin, gives the mix greater volume and a unique consistency. In addition to making them lighter and easier to trowel, this allows you to lay up to **80% larger surfaces** with the same quantity of products compared to traditional adhesives of the same class. **Ultralite adhesives** are formulated with the well-being of users and the environment in mind.

BioBlock® and Drop Effect Technology®

The quality of grouts is essential for the cleanability and maintenance of surfaces. Mapei grouts with **DropEffect® technology** absorb less dirt and are **easy to clean** and their **colour remains stable** over the years. In fact, thanks to this special technology, they are less absorbent to liquids and are **water-repellent**. Liquids deposited on the surface are not absorbed but remain on the surface in the form of droplets, so joints are much easier to clean before stains are formed.

The proliferation of bacteria on the surface of grouts, especially in damp environments such as bathrooms and saunas, may lead to the formation of moulds and fungi. In addition to causing an unsightly finish, these can be harmful for the health of final users. This is why the Mapei Research and Development has developed **BioBlock® technology**: molecules of special organic material distributed throughout the microstructures of the grout that **impede** the formation and proliferation of the microorganisms that cause **mould**. And in so doing, tiled surfaces are healthier and more hygienic and maintain their appearance and finish over the years.

Product Sustainability Solution Chart

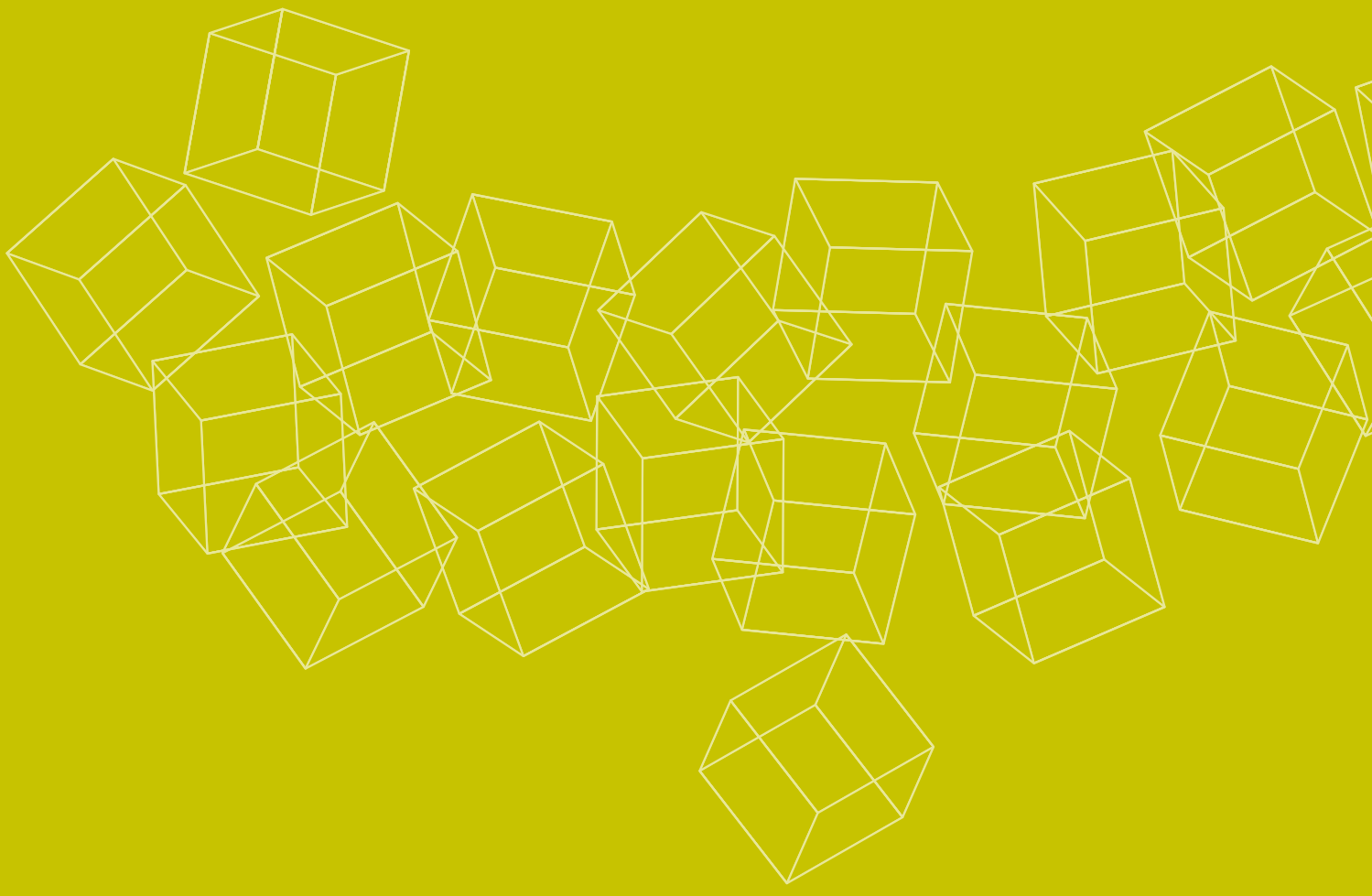
PRODUCT	VOC CONTENT (G/L)	VOC EMISSIONS	EPD	BIO BLOCK	DROP EFFECT	ULTRALITE TECHNOLOGY	CARBON FULLY OFFSET
PRIMERS / MOISTURE VAPOUR BARRIERS							
Primer MF	29.9	CDPH	✓				
Mapeproof Primer	0	GEV EC1 Plus	✓				
Eco Prim Grip	0	GEV EC1 Plus	✓				
Primer G	0	GEV EC1 Plus	✓				
Eco Prim T Plus	19.6	GEV EC1 Plus	✓				
SCREEDS							
Topcem Pronto	0	GEV EC1 Plus	✓				
SELF-LEVELLING COMPOUNDS							
Ultraplan	0	GEV EC1 Plus	✓				
Ultraplan Eco	0	GEV EC1 Plus	✓				
Ultraplan Maxi	0	GEV EC1 Plus	✓				
SMOOTHING COMPOUNDS							
Planiprep SC	0	CDPH	✓				
WATERPROOFING MEMBRANES							
Mapegum WPS	5.1	GEV EC1 Plus	✓				
Mapelastic AquaDefense	54	CDPH	✓				
ADHESIVES							
Keraflex Maxi S1 Zero	5.4	GEV EC1 Plus	✓				✓
Keraquick Maxi S1	0	EC1 Plus	✓				
Ultrabond Eco 380	17	CDPH	✓				
Ultrabond Eco V4 Evolution	0	EC1 Plus	✓				
Ultrabond Eco VS90 Plus	0	EC1 Plus	✓				
Ultralite S1 Flex Zero	3	EC1 Plus	✓			✓	✓
SILICONE							
Mapesil AC	25.8	EC1 Plus	✓	✓			
Mapesil LM	50.6	EC1 Plus	✓	✓			
GROUT							
Ultracolor Plus	0	EC1 Plus	✓	✓	✓		✓

TECHNICAL SUPPORT

Mapei Australia has a Technical Services department dedicated to providing assistance with Mapei products and systems including understanding sustainability certification and obtaining credits under different sustainability rating tools.

Are you working on a sustainable project?

Contact the *Mapei Australia Technical Services team* to discuss your options of Mapei sustainable solutions today!



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